IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant	:	Richard C. Fickle	
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APPEAL BRIEF

Dear Sir:

Applicant submits the following Appeal Brief pursuant to 37 C.F.R. § 41.37 for consideration by the Board of Patent Appeals and Interferences. Please charge any additional fees or credit any overpayment to our deposit Account No. 02-2666.

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I.   REAL PARTY IN INTEREST

The real party in interest is the assignee, Ascent Media Group, LLC.

II.   RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences known to the appellants, the appellants' legal representative, or assignee, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III.   STATUS OF CLAIMS

Claims 1-55 of the present application are pending. The Applicant hereby appeals the rejections of claims 1-55.

IV.   STATUS OF AMENDMENTS

On April 9, 2010, Applicant filed a response to an Office Action dated October 9, 2009. The Examiner issued a Final Office Action on June 28, 2010. On September 23, 2010, Applicant filed a Notice of Appeal. No amendments have been filed subsequent to the final rejection. Applicant hereby appeals the rejection of claims 1-55.

V.   SUMMARY OF CLAIMED SUBJECT MATTER

1. Independent claims 1, 6, 20, 25, 41, and 46:

Independent claim 1 recites, "A method comprising: receiving metadata associated with a multimedia asset data file[1] provided by at least one of a content provider[2] and a multiple service or systems operator ("MSO")[3], the multimedia asset data file having a content element with which the metadata is associated[4] and being delivered to end users upon requested, the metadata related to at least accuracy of delivery[5] of the multimedia

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[1] See Specification, page 5 (lines 10-12), paragraph [0010] (lines 3-5); page 6 (lines 20-22), paragraph [0011] (lines 2-4); Fig. 1, metadata 106, file 108; page 10 (lines 14-17), paragraph [0022] (lines 11-14); page 27 (lines 21-23), paragraph [0027] (lines 17-19); page 25 (lines 15-17), paragraph [0041] (lines 2-4).
[2] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, content provider 102.
[3] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, MSO 112.
[4] See Specification, page 5 (lines 10-21), paragraph [0010] (lines 3-14); page 10, paragraph [0022] (lines 17-19).
[5] See Specification, page 10, paragraph [0022] (lines 17-19).

asset data file; validating[6] the multimedia asset data file and the associated metadata by determining if the multimedia asset data file and the associated metadata comply with business rules provided by the MSO[7]; coordinating[8] delivering the multimedia asset data file and associated metadata to a video-on-demand ("VOD") server[9] maintained by the MSO, wherein coordinating delivering comprises tracking distributing[10] the multimedia asset data file from the content provider to the MSO, and tracking uploading[11] the multimedia asset data file from the MSO to the VOD server[12]; and providing usage reports[13] relating to usage of multimedia asset data files by end users of the MSO."

Independent claim 20 recites, "A method comprising: receiving a plurality of multimedia asset data files having content elements from a plurality of content providers[14]; receiving metadata[15] associated with the content elements in the plurality of multimedia asset data files from at least one of the plurality of content providers and a plurality of multiple service or systems operators (MSOs)[16], the metadata related to at least accuracy of delivery[17] of the multimedia asset data files; receiving business rules[18] provided by the MSO, the business rules corresponding to the multimedia asset data file and being identified[19] with particular MSOs; coordinating uploading[20] the multimedia asset data files to video-on-demand ("VOD") servers[21] maintained by the MSOs using an asset locator[22] assigned to each multimedia asset data file; and tracking uploading[23] the multimedia asset data files."

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[6] See Specification, page 10 (lines 4-6), paragraph [0022] (lines 1-3).
[7] See Specification, page 15, paragraph [0027] (lines 20-21).
[8] See Specification, page 13 (lines 20-22), paragraph [0026] (lines 3-5); page 29, paragraph [0046] (lines 1-3, lines 4-6).
[9] See Specification, page 6 (lines 5-11), paragraph [0010] (lines 23-28; Fig. 1, VOD server 125.
[10] See Specification, page 9 (line 15, 18), paragraph [0021] (lines 3, 6); page 29 (lines 13-15), paragraph [0045] (lines 8-10).
[11] See Specification, page 9 (line 15), paragraph [0022] (lines 17-19).
[12] See Specification, page 6 (lines 5-11), paragraph [0010] (lines 23-28; Fig. 1, VOD server 125.
[13] See Specification, page 6 (lines 13-14), paragraph [0010] (lines 30-32); page 7 (lines 21-22), paragraph [0011] (lines 26-27); page 9 (lines 15-16), paragraph [0021] (lines 4-5); page 38 (lines 12-24), paragraph [0056] (lines 2-4).
[14] See Specification, page 5 (lines 10-12), paragraph [0010] (lines 3-5); page 6 (lines 20-22), paragraph [0011] (lines 2-4); Fig. 1, file 108; page 10 (lines 14-17), paragraph [0022] (lines 11-14); page 27 (lines 21-23), paragraph [0027] (lines 17-19); page 25 (lines 15-17), paragraph [0041] (lines 2-4).
[15] See Specification, page 5 (lines 10-21), paragraph [0010] (lines 3-14); page 10, paragraph [0022] (lines 17-19).
[16] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, MSO 112.
[17] See Specification, page 10, paragraph [0022] (lines 17-19).
[18] See Specification, page 14 (lines 1-2), paragraph [0026] (lines 7-8).
[19] See Specification, page 14 (lines 17-20), paragraph [0027] (lines 13-16).
[20] See Specification, page 9 (line 15), paragraph [0022] (lines 17-19).
[21] See Specification, page 6 (lines 5-11), paragraph [0010] (lines 23-28; Fig. 1, VOD server 125.
[22] See Specification, page 32 (lines 22-23), paragraph [0048] (lines 9-10).
[23] See Specification, page 9 (line 15), paragraph [0022] (lines 17-19).

Independent claim 25 recites, "A method comprising: ingesting[24] content and metadata[25] associated with the content provided by a content provider[26]; coordinating[27] distribution of the metadata and the content, the distribution using a pitcher[28] and a catcher[29], the pitcher transferring the content to a multiple service or systems operator (MSO)[30] and the catcher receiving the content; and coordinating uploading[31] the metadata and the content to a server[32] for delivery to an end user according to scheduling and business rules[33] provided by the MSO."

Independent claim 41 recites, "A content management system[34] comprising: an external layer[35] to interface to an application client; a component programmatic application program interface (API)[36] coupled to the external layer to interface to a plurality of engines[37] comprising: a workflow engine[38] to manage workflows of ingesting a content and metadata associated with the content provided by a content provider[39], coordinating distribution[40] of the metadata and the content, and coordinating uploading the metadata and the content to a server[41] for delivery to an end user according to scheduling and business rules[42] provided by a multiple service or systems operator (MSO)[43]; and a relational database[44] to store the metadata."

Independent claim 46 recites, "A system comprising: a server[45]; a distribution network[46] coupled to the server to distribute a content provided by a content provider[47];

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[24] See Specification, page 9 (lines 14-15), paragraph [0021] (lines 2-3); page 10 (lines 5-6), paragraph [0022] (lines 2-3)
[25] See Specification, Fig. 1, metadata 106.
[26] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, content provider 102.
[27] See Specification, page 13 (lines 20-22), paragraph [0026] (lines 3-5); page 29, paragraph [0046] (lines 1-3, lines 4-6).
[28] See Specification, page 22 (lines 12-14), paragraph [0037] (lines 7-9); page 12 (lines 21-23), paragraph [0038] (lines 1-3); Fig. 1, pitcher 122.
[29] See Specification, page 23 (lines 10-13), paragraph [0038] (lines 13-15); Fig. 1, catcher 124.
[30] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, MSO 112.
[31] See Specification, page 9 (line 15), paragraph [0022] (lines 17-19).
[32] See Specification, page 6 (lines 5-11), paragraph [0010] (lines 23-28; Fig. 1, VOD server 125.
[33] See Specification, page 14 (lines 1-2), paragraph [0026] (lines 7-8).
[34] See Specification, page 10 (lines 9-14), paragraph [0022] (lines 6-11); Fig. 1, VOD management system 110.
[35] See Specification, page 44 (lines 18-19, paragraph [0062] (lines 1-3).
[36] See Specification, page 46 (lines 9-12), paragraph [0063] (lines 7-10); Fig. 7, API 718.
[37] See Specification, page 46 (lines 16-19), paragraph [0063] (lines 14-17).
[38] See Specification, page 46 (line 20), paragraph [0063] (line 18); Fig. 7, workflow engine 722.
[39] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, content provider 102.
[40] See Specification, page 13 (lines 20-22), paragraph [0026] (lines 3-5); page 29, paragraph [0046] (lines 1-3, lines 4-6).
[41] See Specification, page 6 (lines 5-11), paragraph [0010] (lines 23-28; Fig. 1, VOD server 125.
[42] See Specification, page 14 (lines 1-2), paragraph [0026] (lines 7-8).
[43] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, MSO 112.
[44] See Specification, page 47 (lines 1-2), paragraph [0064] (lines 1-2; Fig. 7, metadata DB 722.
[45] See Specification, page 6 (lines 5-11), paragraph [0010] (lines 23-28; Fig. 1, VOD server 125.
[46] See Specification, page 22 (lines 10-12), paragraph [0037] (lines 5-7); Fig. 3, distribution network 120.
[47] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, content provider 102.

and a content management system[48] coupled to the server and the distribution network, the content management system comprising: an external layer[49] to interface to an application client; a component programmatic application program interface (API)[50] coupled to the external layer to interface to a plurality of engines[51] comprising: a workflow engine[52] to manage workflows of ingesting the content and metadata associated with the content, coordinating distribution[53] of the metadata and the content, and coordinating uploading[54] the metadata and the content to the server for delivery to an end user according to scheduling and business rules[55] provided by a multiple service or systems operator (MSO)[56]; and a relational database[57] to store the metadata."

   2.   Dependent claims 2-19, 21-24, 26-40, 42-45, and 47-55:

Dependent Claim 2 recites, in essence, "wherein the metadata are provided by at least one of a plurality of content providers and a plurality of MSOs[58]."

Dependent Claim 3 recites, in essence, "wherein tracking distributing comprises: tracking receipt of the multimedia asset data file in elements, the elements comprising at least one of a feature file, a preview file, a graphic file[59], and associated basic metadata, wherein the associated basic metadata comprises information on the elements used to confirm delivery of the elements[60]; receiving an identification of the MSOs scheduled to receive the multimedia asset data file from the content provider; and receiving delivery dates[61] for delivery of the multimedia asset data file to each of the MSOs."

Dependent Claim 4 recites, in essence, "wherein tracking distributing comprises tracking distributing using a delivery group[62], the delivery group comprising a plurality of multimedia asset data files."

Dependent Claim 5 recites, in essence, "wherein tracking distributing comprises: registering[63] the multimedia asset data file in order to identify the file, wherein registering

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[48] See Specification, page 42 (lines 15-17), paragraph [0059] (lines 3-5); Fig. 6, VTMS POP 130 and VTMS NOC 132.
[49] See Specification, page 44 (lines 18-19, paragraph [0062] (lines 1-3).
[50] See Specification, page 46 (lines 9-12), paragraph [0063] (lines 7-10); Fig. 7, API 718.
[51] See Specification, page 46 (lines 16-19), paragraph [0063] (lines 14-17).
[52] See Specification, page 46 (line 20), paragraph [0063] (line 18); Fig. 7, workflow engine 722.
[53] See Specification, page 13 (lines 20-22), paragraph [0026] (lines 3-5); page 29, paragraph [0046] (lines 1-3, lines 4-6).
[54] See Specification, page 9 (line 15), paragraph [0022] (lines 17-19).
[55] See Specification, page 14 (lines 1-2), paragraph [0026] (lines 7-8).
[56] See Specification, page 5 (lines 10-11), paragraph [0010] (lines 3-4); Fig. 1, MSO 112.
[57] See Specification, page 47 (lines 1-2), paragraph [0064] (lines 1-2; Fig. 7, metadata DB 722.
[58] See Specification, page 6 (line 22) – page 7 (line 2), paragraph [0011] (lines 4-7).
[59] See Specification, page 10 (lines 17-20), paragraph [0022] (lines 14-17).
[60] See Specification, page 10 (lines 20-22), paragraph [0022] (lines 17-19).
[61] See Specification, page 19 (line 19), paragraph [0034] (lines 12-13).

the multimedia asset data file comprises: assigning a provider identifier[64] to the content provider, and assigning a unique identifier[65] to the multimedia asset data file provided by the content provider based upon the provider identifier and a provider asset identification, the provider asset identification being included with the multimedia asset data file by the content provider."

Dependent Claim 6 recites, in essence, "wherein tracking receipt comprises: staging[66] the multimedia asset data file by entering a name for the multimedia asset data file into a staging directory; and providing a master markup language file for the multimedia asset data file, the master markup language file comprising distribution information, scheduling information, content information, and an identification for the multimedia asset data file, wherein the content information comprises data to enable retrieval of a plurality of elements to assemble the multimedia asset data file."

Dependent Claim 7 recites, in essence, "wherein the elements used to assemble the multimedia asset data file comprise at least one of a movie or feature file, a preview file, and a graphic file[67]."

Dependent Claim 8 recites, in essence, "wherein tracking distributing comprises: tracking transmission of a plurality of elements of the multimedia asset data file to the MSO using a pitcher appliance[68]; tracking receipt of the elements of the multimedia asset data file using a catcher appliance[69]; and receiving an alarm signal[70] if one of the elements of the multimedia asset data file is not successfully received by the catcher appliance."

Dependent Claim 9 recites, in essence, "wherein tracking uploading comprises: providing an asset locator[71] identifying the multimedia asset data file to the VOD server; providing a schedule to the VOD server comprising instructions for the VOD server to request the multimedia asset data file from a catcher and the metadata; and tracking

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[62] See Specification, page 19 (lines 8-10), paragraph [0034] (lines 2-4).
[63] See Specification, page 13 (lines 8-10), paragraph [0025] (lines 1-3).
[64] See Specification, page 13 (lines 10-11), paragraph [0025] (lines 3-4).
[65] See Specification, page 13 (lines 12-14), paragraph [0025] (lines 5-7).
[66] See Specification, page 28 (lines 1-2, lines 14-15), page 29 (line 1), paragraph [0044] (lines 17-18, lines 29-30, line 40); Fig. 4, movie staged 410, preview staged 420, graphic staged 430.
[67] See Specification, page 10 (lines 17-20), paragraph [0022] (lines 14-17).
[68] See Specification, page 22 (lines 12-14), paragraph [0037] (lines 7-9); page 12 (lines 21-23), paragraph [0038] (lines 1-3); Fig. 1, pitcher 122.
[69] See Specification, page 23 (lines 10-13), paragraph [0038] (lines 13-15); Fig. 1, catcher 124.
[70] See Specification, page 36 (lines 11-13), paragraph [0052] (lines 9-11); Fig. 5, raise alarm 512, 518, 524, 530, 536, 542, 548, 554.
[71] See Specification, page 32 (lines 22-23), paragraph [0048] (lines 9-10).

retrieval of the multimedia asset data file and associated metadata by initiating file transfers using the asset locator."

Dependent Claim 10 recites, in essence, "wherein the file transfer is a file transfer protocol ("FTP") transfer[72]."

Dependent Claim 11 recites, in essence, "wherein tracking uploading comprises: providing an asset locator identifying an element of the multimedia asset data file to the VOD server, the VOD server submitting the asset locator to a catcher appliance; tracking transmission of the element from the catcher appliance to the VOD server using the asset locator to retrieve the element.

Dependent Claim 12 recites, in essence, "wherein tracking uploading further comprises: receiving an alarm signal from the VOD server if the element is not properly received[73]."

Dependent Claim 13 recites, in essence, "wherein tracking uploading further comprises performing a follow-up or diagnosis[74] upon receiving the alarm indicating that the element is not properly received."

Dependent Claim 14 recites, in essence, "wherein the asset locator is an asset Uniform Resource Locator (URL)[75]."

Dependent Claim 15 recites, in essence, "wherein providing usage reports comprises: receiving from the VOD server data on feature elements requested by end users of the MSO; creating a master reporting database[76] using the data on feature elements requested by end users; and generating a usage report using the data contained in the master reporting database."

Dependent Claim 16 recites, in essence, "wherein providing usage reports further comprises: restricting access[77] by a content provider to the data contained in the master reporting database using the business rules provided by the MSO.

Dependent Claim 17 recites, in essence, "wherein providing usage reports further comprises: analyzing the usage report to determine end user viewing characteristics[78]; and generating an advertising play list targeted to an end user based upon the viewing

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[72] See Specification, page 11 (line 15), paragraph [0023] (line 11).
[73] See Specification, page 27 (lines 21-23), page 28 (lines 10-12, lines 21-23), paragraph [0044] (lines 14-16, lines 26-28, lines 37-39); Fig. 4, raise alarms 408, 418, 428.
[74] See Specification, page 36 (lines 18-19), paragraph [0052] (lines 16-17).
[75] See Specification, page 32 (lines 3-6, line 23), paragraph [0047] (lines 36-39), paragraph [0048] (line 10).
[76] See Specification, page 38 (lines 18-20), paragraph [0056] (lines 8-10).
[77] See Specification, page 39 (lines 1-2), paragraph [0056] (lines 14-15).

characteristics of the end user, wherein the advertising play list[79] comprises advertising selected based upon the viewing characteristics of the end user."

Dependent Claim 18 recites, in essence, "wherein providing usage reports further comprises: supplementing[80] a multimedia asset data file with data contained in the usage report, wherein the usage report comprises usage data for the multimedia asset data file."

Dependent Claim 19 recites, in essence, "wherein providing usage reports further comprises: analyzing the usage report to determine end user viewing characteristics; selecting multimedia asset data files based upon end user viewing characteristics; and performing a campaign management function[81] chosen from the group consisting of bundling selected multimedia asset data files, setting pricing for selected multimedia asset data files, and setting promotions for selected multimedia asset data files."

Dependent Claim 21 recites, in essence, "validating the multimedia asset data files by determining if the received metadata and multimedia asset data files comply with business rules provided by the MSOs."

Dependent Claim 22 recites, in essence, "wherein coordinating uploading comprises: coordinating uploading the associated metadata for the multimedia asset data files to the VOD servers; distributing a localized master schedule[82] to each MSO; and providing a schedule update to each MSO at regular intervals[83]."

Dependent Claim 23 recites, in essence, "wherein tracking comprises: tracking uploading the multimedia asset data files and the associated metadata to the VOD servers by reference to each MSO's localized master schedule."

Dependent Claim 24 recites, in essence, "wherein each schedule update comprises instructions for inserting and deleting[84] multimedia asset data files from each MSO's localized master schedule."

Dependent Claim 26 recites, in essence, "further comprising: providing visibility into usage of the content[85]."

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[78] See Specification, page 20 (lines 11-13), paragraph [0035] (lines 13-15).
[79] See Specification, page 20 (line 1), paragraph [0035] (line 3).
[80] See Specification, page 40 (lines 3-8), paragraph [0056] (lines 40-45).
[81] See Specification, page 21 (lines 4-7), paragraph [0036] (lines 1-4).
[82] See Specification, page 30 (lines 17-19), paragraph [0047] (lines 3-5).
[83] See Specification, page 30 (lines 21-23), paragraph [0047] (lines 7-9).
[84] See Specification, page 31 (lines 19-22), paragraph [0047] (lines 28-31).
[85] See Specification, page 38 (lines 13-14), paragraph [0056] (lines 3-4).

Dependent Claim 27 recites, in essence, "wherein ingesting comprises: registering the content[86]; and coordinating accessing the content located in one of an internal location and an external location."

Dependent Claim 28 recites, in essence, "wherein registering the content comprises: assigning a provider identifier to the content provider[87]; and assigning a globally unique identifier[88] to the content based on the provider identifier and a provider asset identifier."

Dependent Claim 29 recites, in essence, "wherein ingesting comprises: receiving the business rules from the MSO[89]; and validating the metadata and the content using the business rules."

Dependent Claim 30 recites, in essence, "wherein receiving the business rules comprises: receiving the business rules including at least one of a rating filter, a pricing rule, a category rule, and a platform conversion rule[90]."

Dependent Claim 31 recites, in essence, "wherein ingesting comprises: customizing an electronic program guide (EPG)[91]."

Dependent Claim 32 recites, in essence, "wherein ingesting comprises: providing an interface to allow a user to view and analyze[92] metadata and scheduling information associated with the content."

Dependent Claim 33 recites, in essence, "wherein coordinating the distribution comprises: interacting with an asset distribution system (ADS) to facilitate delivery of the content from a content provider to the MSO, the ADS including the pitcher and the catcher[93]."

Dependent Claim 34 recites, in essence, "wherein interacting with the ADS comprises: receiving information regarding when a transmission of an element of the content is initiated from the pitcher[94]; requesting retransmission[95] of the element if an alarm is received from the catcher; and tracking a request from a server to release the content received by the catcher."

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[86] See Specification, page 41 (lines 9-12), paragraph [0058] (lines 2-5).
[87] See Specification, page 13 (lines 10-12), paragraph [0025] (lines 3-4).
[88] See Specification, page 13 (lines 14-17), paragraph [0025] (lines 7-10).
[89] See Specification, page 14 (lines 9-11), paragraph [0027] (lines 5-7).
[90] See Specification, page 14 (lines 11-13), paragraph [0027] (lines 7-9).
[91] See Specification, page 14 (line 13), paragraph [0027] (line 9).
[92] See Specification, page 19 (lines 7-8), paragraph [0034] (lines 1-2).
[93] See Specification, page 22 (lines 10-12), paragraph [0037] (lines 5-7); Fig. 3, distribution network 120.
[94] See Specification, page 26 (lines 20-22), paragraph [0042] (lines 20-22).

Dependent Claim 35 recites, in essence, "wherein coordinating uploading comprises: receiving a schedule request[96] from the server; providing a customized or localized master schedule[97] for the MSO to the server, the master schedule having an asset locator; receiving a metadata locator corresponding to the content from the server; providing an asset locator to the server in response to the metadata locator, the server retrieving an element of the content from a catcher using the asset locator; and interacting with the server during transfer of the element of the content from the catcher to the server."

Dependent Claim 36 recites, in essence, "wherein providing the asset locator comprises: re-transmitting the asset locator upon receiving an alarm from the server indicating that the asset locator is not received properly by the server."

Dependent Claim 37 recites, in essence, "wherein interacting with the server comprises: performing a follow-up or diagnosis upon receiving an alarm from the server indicating that the element is not received properly by the server."

Dependent Claim 38 recites, in essence, "wherein providing visibility into usage of the content comprises: preparing a usage report; and providing access to the usage report to a multiple service or systems operator (MSO) or a content provider."

Dependent Claim 39 recites, in essence, "wherein preparing the usage report comprises: creating a master reporting database including usage information from across a MSO network."

Dependent Claim 40 recites, in essence, "wherein preparing the usage report further comprises: exporting the usage report to an analysis system[98]."

Dependent Claim 42 recites, in essence, "wherein the plurality of engines further comprises: a business objects engine[99] to managing business rules associated with the content, the business rules being provided by the MSO; a package engine[100] to manage packaging the content; a scheduling engine[101] to schedule deployment of the content; a

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[95] See Specification, page 26 (lines 16-18), paragraph [0042] (lines 16-18).
[96] See Specification, page 30 (lines 21-23), paragraph [0047] (lines 7-9).
[97] See Specification, page 29 (line 11), paragraph [0045] (line 6).
[98] See Specification, page 39 (lines 5-6), paragraph [0056] (lines 18-20).
[99] See Specification, page 46 (line 20), paragraph [0063] (line 18); Fig. 7, business objects 720.
[100] See Specification, page 46 (lines 20-21), paragraph [0063] (lines 18-19); Fig. 7, packaging engine 724
[101] See Specification, page 46 (line 22), paragraph [0063] (line 20); Fig. 7, scheduling engine 730.

platform converter engine[102] to customize an electronic program guide (EPG)[103] designated by the MSO; and a localization engine[104] to localize the content."

Dependent Claim 43 recites, in essence, "wherein the external layer comprises: a Web service API to facilitate communication with an application used by one of the MSO and the content provider."

Dependent Claim 44 recites, in essence, "wherein the Web service API performs operations comprising: registering the content; receiving a confirmation call from one of a pitcher[105] and a catcher[106] regarding status of transfer of an element of the content; and receiving a schedule request from the server for a schedule to distribute or upload the content. "

Dependent Claim 45 recites, in essence, "wherein the Web service API further performs operations comprising: receiving a metadata request from the server for localized package metadata; and receiving a reporting call from the server to deliver usage report."

Dependent Claim 47 recites, in essence, "wherein the plurality of engines further comprises: a business objects engine[107] to managing business rules associated with the content, the business rules being provided by the MSO; a package engine[108] to manage packaging the content; a scheduling engine[109] to schedule deployment of the content; a platform converter engine[110] to customize an electronic program guide (EPG)[111] designated by the MSO; and a localization engine[112] to localize the content."

Dependent Claim 48 recites, in essence, "wherein the external layer comprises: a Web service API[113] to facilitate communication with an application used by one of the MSO and the content provider."

Dependent Claim 49 recites, in essence, "wherein the Web service API performs operations comprising: registering the content[114]; receiving a confirmation call from one of

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[102] See Specification, page 46 (line 22), paragraph [0063] (line 20); Fig. 7, platform converter 726.
[103] See Specification, page 14 (line 13), paragraph [0027] (line 9).
[104] See Specification, page 46 (lines 21-22), paragraph [0063] (lines 19-20); Fig. 7, localization engine 728.
[105] See Specification, page 22 (lines 12-14), paragraph [0037] (lines 7-9); page 12 (lines 21-23), paragraph [0038] (lines 1-3); Fig. 1, pitcher 122.
[106] See Specification, page 23 (lines 10-13), paragraph [0038] (lines 13-15); Fig. 1, catcher 124.
[107] See Specification, page 46 (line 20), paragraph [0063] (line 18); Fig. 7, business objects 720.
[108] See Specification, page 46 (lines 20-21), paragraph [0063] (lines 18-19); Fig. 7, packaging engine 724.
[109] See Specification, page 46 (line 22), paragraph [0063] (line 20); Fig. 7, scheduling engine 730.
[110] See Specification, page 46 (line 22), paragraph [0063] (line 20); Fig. 7, platform converter 726.
[111] See Specification, page 14 (line 13), paragraph [0027] (line 9).
[112] See Specification, page 46 (lines 21-22), paragraph [0063] (lines 19-20); Fig. 7, localization engine 728.
[113] See Specification, page 40 (lines 14-15), paragraph [0057] (lines 3-4).
[114] See Specification, page 41 (lines 9-12), paragraph [0058] (lines 2-5).

a pitcher[115] and a catcher[116] regarding status of transfer of an element of the content; and receiving a schedule request from the server for a schedule to distribute or upload the content."

Dependent Claim 50 recites, in essence, "wherein the Web service API further performs operations comprising: receiving a metadata request from the server for localized package metadata; and receiving a reporting call from the server to deliver usage report."

Dependent Claim 51 recites, in essence, "wherein the distribution network comprises: a pitcher used by the content provider to transmit the content and the metadata to the MSO via a distribution channel; a catcher used by the MSO to receive transmission from the pitcher via a downlink channel."

Dependent Claim 52 recites, in essence, "wherein the distribution channel comprises a satellite uplink facility and the downlink channel comprises a satellite downlink facility[117]. "

Dependent Claim 53 recites, in essence, "wherein one of the pitcher and the catcher communicates with the content management system via a network connection."

Dependent Claim 54 recites, in essence, "wherein the catcher receives the content locally using one of a physical medium, a local network, and a terrestrial-based network[118]."

Dependent Claim 55 recites, in essence, "wherein the content is one of a video-on-demand (VOD) content, an asset data file, a broadband content, and a network content."

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[115] See Specification, page 22 (lines 12-14), paragraph [0037] (lines 7-9); page 12 (lines 21-23), paragraph [0038] (lines 1-3); Fig. 1, pitcher 122.
[116] See Specification, page 23 (lines 10-13), paragraph [0038] (lines 13-15); Fig. 1, catcher 124.
[117] See Specification, page 24 (lines 1-3), paragraph [0039] (lines 1-3); Fig. 3, satellite distribution channel 126.
[118] See Specification, page 25 (lines 14-17), paragraph [0041] (lines 1-4).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-40 stand rejected under 35 U.S.C. §101 as not falling within one of the four categories of invention.

B. Claims 25-33, 38-43, 46-48, 51, 53-55 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Publication No. 2002/0143565 issued to Headings et al. ("Headings").

C. Claim 52 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Headings in view of U.S. Publication No. 2002/0104093 issued to Buehl et al. ("Buehl").

D. Claims 1-24, and 34 under 35 U.S.C. §103(a) as being unpatentable over Headings in view of U.S. Publication No. 2002/0078174 issued to Sim et al. ("Sim").

E. Claims 35-37, 44-45, and 49-50 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Headings in view of U.S. Publication No. 2003/0020744A1 issued to Ellis et al. ("Ellis").

VII. ARGUMENTS

In the Final Office Action, the Examiner rejected claims 1-40 under 35 U.S.C. §101; claims 25-33, 38-43, 46-48, 51, 53-55 under 35 U.S.C. §102; and claims 52, 1-24, and 34, 35-37, 44-45, and 49-50 under 35 U.S.C. §103(a). Applicant respectfully traverses the rejections and submits that the Examiner has not met the burden of establishing a prima facie case of unpatentability and obviousness.

To establishing a prima facie case of unpatentability under 35 U.S.C. §101, USPTO personnel must identify and explain in the record the reasons why a claim is for an abstract idea with no practical application. Applicant respectfully submits that the Examiner has not proved that the claim is for an abstract idea with no practical application.

To establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP §2143, p. 2100-126 to 2100-130 (8th Ed., Rev. 5, August 2006).* Applicant respectfully submits that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

Furthermore, the Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated: "Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined." MPEP 2141. In *KSR International Co. vs. Teleflex, Inc.*, 127 S.Ct. 1727 (2007) (Kennedy, J.), the Court explained that "[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." The Court further required that an explicit analysis for this reason must be made. "[R]ejections on obviousness

grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR 127 S.Ct.* at 1741, quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). In the instant case, Applicant respectfully submits that there are significant differences between the cited references and the claimed invention and there is no apparent reason to combine the known elements in the manner as claimed, and thus no *prima facie* case of obviousness has been established.

A. **Claims 1-40 Are Directed to Statutory Subject Matter Under 35 U.S.C. §101.**

In the Final Office Action, the Examiner rejected claims 1-40 under 35 U.S.C. §101 as not falling within one of the four statutory categories of invention, citing *In Re Bilski*, 88 USPQ2d 1385. In particular, the Examiner contends that claims 1 and 20, reciting a method comprising receiving metadata, are broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent (Final Office Action, page 15, paragraph 3.) The Examiner further contends that the feature of "receiving metadata . . ." could be performed by a person/operator/distributor and the VOD server could be video rental store; the feature of "delivery .." could be performed via mail (Final Office Action, page 15, paragraph 3.) Applicant respectfully disagrees and submits that the Examiner's interpretation of *Bilski* is misplaced.

A claimed process is statutory if it is limited to a practical application of the abstract idea or mathematical algorithm in the technological arts. See *Alappat*, 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond v. Diehr*, 450 U.S. at 192, 209 USPQ at 10). See also *Alappat* 33 F.3d at 1569, 31 USPQ2d at 1578-79 (Newman, J., concurring) ("unpatentability of the principle does not defeat patentability of its practical applications") (citing *O'Reilly v. Morse*, 56 U.S. (15 How.) at 114-19).

According to the *Interim Bilski Guidance* provided by Robert Bahr, Acting Associate Commissioner for Patent Examination Policy, dated July 27, 2010, the machine-or-transformation test remains an investigative tool and is a useful starting point for determining whether a claimed invention is a patent-eligible process under 35 U.S.C. 101.

In its *en banc* majority opinion in *In re Bilski*, the U.S Court of Appeals for the Federal Circuit concludes that the "useful, concrete and tangible result" inquiry is

inadequate and reaffirms that the machine-or-transformation test outlined by the Supreme Court is the proper test to apply. *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008). Under the principles discussed in the *Bilski* decision, Applicant believes that claims 1-40 satisfy the machine-or-transformation test and are therefore statutory under 35 U.S.C. §101.

At the onset, the *Bilski* court emphatically states that "the proper inquiry under §101 is not whether the process claims recites sufficient 'physical steps,' but rather whether the claim meets the machine-or-transformation test." Accordingly, "a claim that purportedly lacks any 'physical steps' but is still tied to a machine or achieves an eligible transformation passes muster under §101." *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008). The *Bilski* court focuses the analysis under the principle articulated by the Supreme Court that whether the claim recites a fundamental principle and if so, whether it would pre-empt substantially all uses of that fundamental principle if allowed. *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).

The *Bilski* court articulates the machine-or-transformation test as a two-branched inquiry. The *Bilski* court states that an applicant may show that a process claim satisfies §101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article, citing *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). Applicant submits that claims 1-40 not only satisfy one but both tests as analyzed below.

1. Tying to a particular machine or apparatus:

In *Bilski*, the issues specific to the machine implementation part of the test are not before the court for review. The *Bilski* court therefore leaves to future cases the elaboration of the precise contours of machine implementation. However, there are a number of cases that have been decided by the court that provide clear guidelines in determining whether a claim is tied to a particular machine.

In *In re Abele*, when interpreting an earlier case, *In re Walter*, the court states that "Walter should be read as requiring no more than that the algorithm be 'applied in any manner to physical elements or process steps,' provided that its application is circumscribed by more than a field of use limitation or non-essential post-solution activity. *In re Abele and Marshall*, 684 F.2d (CCPA 1982), 214 USPQ 682, 686 (CCPA 1982). The *Abele* court further states that if the claimed invention is an application of the algorithm,

§101 will not bar the grant of a patent. *In re Abele,* 684 F.2d (CCPA 1982), 214 USPQ at 687 (CCPA 1982).

Accordingly, "tying to a particular machine" does not require that the process has to be performed by a machine, as the Examiner incorrectly suggests (Final Office Action, page 3, lines 10-14) ("the feature of 'receiving metadata …' could be performed by a person/operator/distributor . . . the step of "coordinating delivery.." could be performed by a person/operator. ..."). Rather, "tying to a particular machine" merely requires that the process *is applied to* a particular machine or apparatus, or a physical object.

An analysis of claim 1 shows that the process is applied a particular apparatus, satisfying the "tying to a particular apparatus" inquiry.

The first element of the claim recites "receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a multiple service or systems operator ("MSO"), the multimedia asset data file having a content element with which the metadata is associated and being delivered to end users upon requested, the metadata related to at least accuracy of delivery of the multimedia asset data file." This element involves "metadata," "a multimedia asset data file," "a content element," "a content provider," and "a multiple service or systems operator." All of these elements are physical entities and represent a particular apparatus.

Metadata are structured data which describe the characteristics of a resource. Metadata is structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource. Metadata is often called data about data or information about information. The following links are examples of metadata:

http://www.library.uq.edu.au/iad/ctmeta4.html

http://www.niso.org/publications/press/UnderstandingMetadata.pdf

Accordingly, metadata are not abstract idea. They represent physical entities such as records stored in memory devices, which are related to a particular machine or apparatus.

A multimedia asset data file is a physical entity. It is an electronic or electromagnetic record of a multimedia content. It is a tangible medium. It is not an abstract idea like democracy or freedom. Accordingly, it is tied to a particular

apparatus or a machine. In addition, it is provided by a content provider or a multiple service or systems operator, which is also a physical entity.

Therefore, the first element of the claims involves physical objects that are tied to a particular machine or apparatus.

The second element of the claim recites "validating the multimedia asset data file and the associated metadata by determining if the multimedia asset data file and the associated metadata comply with business rules provided by the MSO."

Again the second element involves the multimedia asset data file and therefore it is also tied to a particular machine or apparatus.

The third element of the claim recites "coordinating delivering the multimedia asset data file and associated metadata to a video-on-demand ("VOD") server maintained by the MSO, wherein coordinating delivering comprises tracking distributing the multimedia asset data file from the content provider to the MSO, and tracking uploading the multimedia asset data file from the MSO to the VOD server; and providing usage reports relating to usage of multimedia asset data files by end users of the MSO."

The third element clearly ties to a particular machine or apparatus. The element recites delivering .. to a video-on-demand ("VOD") server. A VOD server is clearly a particular machine or apparatus. The delivering of the multimedia asset data file and associated metadata to a VOD server is clearly "tied to a particular machine or apparatus." In addition, "usage reports" are physical entities and therefore they are also tied to a particular machine and apparatus.

Therefore, the third element of the claim is also tied to a particular machine or apparatus.

In summary, since all the elements of the claim apply process operations on multimedia asset data file and metadata through delivering to a VOD server, which is a particular apparatus, they are all tied to a particular machine or apparatus.

2. Transformation of an article:

In addition to tying to a particular machine or apparatus, the rejected claims also transform an article.

The claimed process receives metadata associated with a multimedia asset data file provided by at least one of a content provider and a multiple service or systems operator, validates the multimedia asset data file and the associated metadata, and coordinates

delivering the multimedia asset data file and associated metadata to a video-on-demand
("VOD") server. In other words, the claim transforms the location of a multimedia asset
data file from the content provider or the MSO, transforms a non-validated multimedia
asset data file and the associated metadata to validated multimedia asset data file and the
associated metadata, and transforms the location of the validated multimedia asset data file
and the associated metadata to a VOD server. Accordingly, the claim, among other things,
transforms the multimedia asset data file and the associated metadata from one location to
another location.

      The *Bilski* court is very clear about what it means by "article" in transforming an
article. The *Bilski* court states that "[s]o long as the claimed process is limited to a
practical application of a fundamental principle to transform specific data, and the claim is
limited to a visual depiction that represents specific physical objects or substances, there is
no danger that the scope of the claim would wholly pre-empt all uses of the principle." *In
re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008).

      In discussing *Abele*, the *Bilski* court states that "the claim was not required to
involve any transformation of the underlying physical object that the data represented." *In
re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008). In other words, as long as a data
represents a physical object, transformation of this data is sufficient to satisfy the
transformation test. In *Abele*, the data represents the X-ray attenuation data produced in a
two-dimensional field by a computed tomography scanner. The *Bilski* court states that this
data clearly represents physical and tangible objects, namely the structure of bones, organs,
and other body tissues. Here, the process operations operate on data representing physical
objects. The multimedia asset data file is clearly a tangible object. The associated
metadata represent the data record, a physical object. The VOD server is a physical object.
Since these elements are all physical objects, the claim therefore transforms the data
representing physical objects.

      Similarly, independent claims 20 and 25 recite "multimedia asset data files,"
"content elements," "VOD sever," "asset locator," "content provider," "MSO," (claim 20);
and "content," "metadata," "a server," "end user," "content provider," "MSO". These
elements are all physical elements, representing physical objects and are tied to a particular
machine or apparatus (e.g., VOD sever, server). The process operations also transform the
multimedia asset data file, the content by coordinating the upload of the content and

tracking the upload, ingesting the content, coordinating the distribution and uploading of the content and the metadata.

In the Final Office Action, the Examiner contends that "the 'multimedia asset data file,' 'content element,' 'VOD server,' 'asset locator,' 'content provider,' 'MSO,' recited in the claims are not 'physical objects' according to Bilski because they are not bones, organ, other body tissues." (Final Office Action, pages 2-3). This argument is untenable because in applying facts to a case, it is not necessary to have identical facts. Rather, equivalent facts can be used. Furthermore, the gist of *Bilski* is not about bones, organs, or body tissues. Rather, *Bilski* stands for the proposition that as long as a data represents a physical object, transformation of this data is sufficient to satisfy the transformation test.

In summary, the rejected claims satisfy not only one, but both the machine and transformation tests as articulated by the Supreme Court and the Court of Appeals for the Federal Circuit. Furthermore, the scope of the claim in the principles of performance simulation is such that there is no danger that it would wholly pre-empt all uses of the principle.

Accordingly, Applicant submits that claims 1-40 are statutory under 35 U.S.C. §101 and respectfully requests the rejections be withdrawn.

B.   Claims 25-33, 38,43, 46-48, 51, and 53-55 and 26-27 Are Not Anticipated Under 35 U.S.C. §103(a) By Headings.

In the Final Office Action, the Examiner rejected claims 25-33, 38-43, 46-48, 51, 53-55 under 35 U.S.C. §102(e) as being anticipated by U.S. Publication No. 2002/0143565 issued to Headings et al. ("Headings"). Applicant acknowledges the Examiner's note regarding US 2009/0144154 ("Schein"), US 2002/0143782A1 ("H782"), US 2009/0138925A1 ("H925"), US 2002/0083006A1 ("H006"). Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a prima facie case of anticipation.

Headings discloses a digital entertainment service. A Digital Content Services function of DESP 100 generally includes receiving and archiving media assets from a content supplier (Headings, paragraph [0027], lines 1-3; Fig. 1.) A digital service platform deposits its media assets, manages its media assets using business rules to control the distribution of and revenue generated from the media assets, and tracks consumer usage of

its media assets to assist in consumer marketing decisions (<u>Headings</u>, paragraph [0008], lines 1-5.) Consumers access content in an aggregated manner similar to that of a traditional brick and mortar store (<u>Headings</u>, paragraph [0008], lines 12-14.) A consumer selects and orders the media content desired (<u>Headings</u>, paragraph [0055], lines 1-2; Fig. 2, step 208.) After a billing procedure, the consumer-requested content is electronically delivered to the consumer (<u>Headings</u>, paragraph [0064], lines 1-2; Fig. 2, steps 214 – 216.) Media assets, business rules, and related metadata, are bundled to create an "item" and ultimately distributed by the content user as providing unique identification and naming (<u>Headings</u>, paragraph [0035], lines 1-5.) Items are classified and grouped into genres and channels commonly known by the content user (<u>Headings</u>, paragraph [0035], lines 8-11.) Metadata may include such descriptive information like copyright information, titles, authors, and abstracts (<u>Headings</u>, paragraph [0033], lines 5-6.) Intelligent media may include license tracking information (<u>Headings</u>, paragraph [0033], lines 12-13.)

     <u>Headings</u> does not disclose, either expressly or inherently, at least one of: (1) ingesting content and metadata associated with the content provided by a content provider; (2) coordinating distribution of the metadata and the content, the distribution using a pitcher and a catcher, the pitcher transferring the content to a multiple service or systems operator (MSO) and the catcher receiving the content; and (3) coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by the MSO; as recited in claim 25; or (1) an external layer to interface to an application client; (2) a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines comprising: (2a) a workflow engine to manage workflows of ingesting a content and metadata associated with the content provided by a content provider, (2b) coordinating distribution of the metadata and the content, and coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems operator (MSO); and (3) a relational database to store the metadata, as recited in claims 41 and 46.

     <u>Headings</u> merely discloses a digital service platform controls the distribution of the media assets (<u>Headings</u>, paragraph [0008], lines 1-5.), NOT coordinating distribution of the metadata and the content, the distribution using a pitcher and a catcher, the pitcher transferring the content to a multiple service or systems operator (MSO) and the catcher

receiving the content. A Digital Content Services function of DESP 100 merely receives and archives media assets from a content supplier (Headings, paragraph [0027], lines 1-3; Fig. 1.). There is no pitcher to transfer the content to the MSO and there is no catcher to receive the content. As disclosed in the Specification, the pitcher and/or the catcher may be implemented by a dedicated server separated from the management system.

In the Final Office Action, the Examiner contends that "the distribution must be using a pitcher (for example, transmitting interface in content supplier) and a catcher (for example, receiving interface in service platform 108)." (Final Office Action, page 6, lines 20-22). Applicant respectfully disagrees. A mere interface is not an appliance or a server. It is embedded as part of the platform. Furthermore, Headings does not disclose any of these interfaces.

The Examiner further contends that "Heading[s] must disclose pitcher and catcher in order for the content to be transferred and received." (Final Office Action, page 8, lines 15-19.) Applicant respectfully disagrees. There are many ways for a content to be received or transferred. For example, a content may be stored on a physical medium such as a DVD or a memory stick and is read directly by the Digital Content Services function of DESP 100. Apparently, the Examiner relies on the theory of inherency. However, Applicant submits that the Examiner's reliance of the theory of inherency is improper.

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 193). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic <u>necessarily</u> flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). Here, the Examiner has not provided a basis in fact

and/or technical reasoning to support the use of a pitcher or a catcher to receive or transfer a content.

In addition, <u>Headings</u> merely discloses the content to be electronically delivered to the consumer upon consumer's ordering, NOT coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by the MSO. A consumer selects and orders the desired media content (<u>Headings</u>, paragraph [0055], lines 1-2; Fig. 2, step 208.) After a billing procedure, the consumer-requested content is electronically delivered to the consumer (<u>Headings</u>, paragraph [0064], lines 1-2; Fig. 2, steps 214 – 216.) Therefore, the delivery is not according to scheduling and business rules provided by the MSO. Since the system emulates a brick and mortar store that allows the consumers to browse and purchase content choices (<u>Headings</u>, paragraph [0003], lines 7-9; paragraph [0004], lines 3-4.), it cannot upload the content for delivery to an end user according to a schedule provided by the MSO. The system in <u>Headings</u> is designed for a consumer to select a content to purchase as if he or she walks into a video store. In contrast, the claimed invention recites operations that coordinate the delivery of the content to the end user according to a schedule provided by the MSO.

In the Final Office Action, the Examiner contends that "'scheduling' is read on when user make selection of a title, channel, etc., deliver the content associated with the requested title." (<u>Final Office Action</u>, page 9, lines 10-12.) Applicant respectfully disagrees. Making selection has nothing to do with scheduling. One can make a selection without resorting to any pre-determined time or date.

In rejecting claims 28, the Examiner contends that <u>Headings</u> discloses assigning a global unique identifier (<u>Final Office Action</u>, page 18.) Applicant respectfully disagrees. <u>Headings</u> merely discloses the unique identification and naming of media assets, business rules, and related metadata, which are bundled to create an item (<u>Headings</u>, paragraph [0035], lines 1-4). Accordingly, the identification and naming are merely combined to create an item. This is not equivalent to a global unique identifier based on the provider identifier and a provider asset identifier. In addition, <u>H782</u> merely discloses creating a unique identifier or internal title used to track the item data structure for further use (<u>H782</u>, paragraph [0032], lines 3-4.), NOT assigning a globally unique identifier to the content based on the provider identifier and a provider asset identifier. There is no evidence that

the unique identifier mentioned in H782 is based on the provider identifier and a provider asset identifier.

In the Final Office Action, the Examiner contends that the "title, or unique identifier of the asset must be assigned based on the provider identifier and a provider asset identifier in order of keep track of the usage of the asset and to provide royalty payment on the asset to the content supplier." Applicant respectfully disagrees. Providing royalty payments may be made on the basis of a group of media assets belonging to the content supplier without specifically assigning the global unique identifier to the asset.

In rejecting claim 29, the Examiner contends that Headings discloses validating the metadata and the content using the business rules, citing several paragraphs. Applicant respectfully disagrees. Headings merely discloses content suppliers can submit a media asset and associated business rules into a safe and secure platform depository (Headings, paragraph [0012], lines 1-4.), NOT validating the content and metadata using the business rules. Depositing the media asset and the business rules merely stores them in a safe depository. It does not validate the media asset. Headings explicitly states that the Digital Content Services function preferably includes use of a software-based application for creating and storing business rules 104, which govern how a particular media asset 102 is to be used (Headings, paragraph [0028], lines 1-4.) In other words, the business rules are used only to guide the use of the media asset 102. They are not used to validate the media asset 102. None of the cited paragraph discloses or suggests validating the content and the metadata using the business rules. The Examiner has not specifically pointed out the specific lines in the cited paragraphs that disclose this aspect of the claim.

In the Final Office Action, the Examiner contends that "the metadata and the content *must be validated* in accordance with/using the business rules in order to manage, control, distribute or to keep track of usage of particular media asset in accordance with business rules" (Final Office Action, page 11, lines 1-4. Emphasis added.) Applicant respectfully disagrees. Managing, controlling, distributing, or keeping track of usage of particular media asset may be carried out without validating the metadata and/or the content. Apparently, the Examiner relies on the theory of inherency. However, Applicant submits that the Examiner's reliance of the theory of inherency is improper. Here, the Examiner has not provided a basis in fact and/or technical reasoning to support the

validation of metadata or content in the management, control, distribution, or keeping track of the media asset.

        In rejecting claim 33, the Examiner contends that <u>Headings</u> discloses a pitcher and a catcher (<u>Office Action</u>, pages 8-9.) Applicant respectfully disagrees. A pitcher or a catcher is an explicit appliance that is designed to transfer the content and to receive the content. A mere act of receiving a content does not mean that it is done using a catcher.

        To anticipate a claim, the reference must teach every element of a claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Vergegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the…claim." *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 1236, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989). The Examiner bears the burden of presenting at least a prima facie case of anticipation. *In re King*, 801 F.2d 1324, 1327, 231 USPQ 136, 138-139 (Fed. Cir. 1986); *In re Wilder*, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). Only if that burden is met, does the burden of going forward shift to the applicant. *In re King*, 801 F.2d at 1327, 231 USPQ at 138-139; *In re Wilder*, 429 F.2d at 450, 166 USPQ at 548. Once a prima facie case is established and rebuttal evidence is submitted, the ultimate question becomes whether, based on the totality of the record, the Examiner carried his burden of proof by a preponderance. See *In re Oetiker*, 977 F.2d 1443, 1445. 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Since the Examiner failed to show that <u>Headings</u> teaches or discloses any one of the above elements, the rejection under 35 U.S.C. §102 is improper.

        Therefore, Applicant believes that independent claims 25, 41 and 46 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicant respectfully requests the rejection under 35 U.S.C. §102(e) be withdrawn.

    C.   <u>**Claim 52 Is Not Obvious Under 35 U.S.C. §103(a) Over Headings In View Of Buehl.**</u>

    <u>Headings</u> is discussed above.

Buehl discloses systems and methods for packaging, distributing and managing assets in digital cable systems. Cable television systems now receive broadcasts and retransmit them with other programming to users over land-line networks, typically comprising fiber optic cable and coaxial cable (Buehl, paragraph [0003], lines 2-5.) The content/service providers 15 could represent an Internet Service Provider (ISP) providing data to the system to enable subscribers web access or web-enhanced video via the subscriber's television set (Buehl, paragraph [0026], lines 15-18.) The content/service provider 15 transmits the content to a headend 30 via a high speed distribution network 25 for further transmission to subscribers downstream in the network (Buehl, paragraph [0026], lines 18-21.) The high speed distribution network 25 includes one or more satellite and/or fiber optic components and links for high-speed data transmission of content and/or services to the headend 30 (Buehl, paragraph [0026], lines 24-27.)

Headings and Buehl, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) – (3) as above under the §102(e) rejection; and (4) the distribution channel comprises a satellite uplink facility and the downlink channel comprises a satellite downlink facility, as recited in claim 52.

As discussed above, Headings does not disclose or render obvious elements (1) – (3) as above. Accordingly, a combination of Headings with any other references in rejecting claim 52, which depends on 46, is improper.

Furthermore, Buehl merely discloses a high speed distribution network 25 for transmission to subscribers *downstream* in the network (Buehl, paragraph [0026], lines 18-21.), not a satellite *uplink* facility as recited in the rejected claim.

In the Final Office Action, the Examiner contends that the Examiner relies on Buehl for the teaching of distribution channel comprising a satellite uplink facility and the downlink channel comprises a satellite downlink facility (Final Office Action, page 12, lines 12-14). However, as discussed above, Buehl does not disclose a satellite *uplink* facility as recited in the rejected claim.

D. Claims 1-24, and 34 Are Not Obvious Under 35 U.S.C. §103(a) Over Headings In View Of Sim.

Headings is discussed above.

Sim discloses method and apparatus for automatically adapting a node in a network. A content provider uploads and/or manages large payload files in the scalable content delivery network (SCDN) 500 through its content provider client (CPC) 530 (Sim, paragraph [0076], lines 7-9; paragraph [0080], lines 4-6). A content provider uses content management applications running on a Content Provider Client system to upload a content and file metadata onto a Content Management Server (CMS) (Sim, paragraph [0094], lines 1-6).

Headings and Sim, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a multiple service or systems operator ("MSO"), the multimedia asset data file having a content element with which the metadata is associated and being delivered to end users upon requested, the metadata related to at least accuracy of delivery of the multimedia asset data file; (2) validating the multimedia asset data file and the associated metadata by determining if the multimedia asset data file and the associated metadata comply with business rules provided by the MSO; (3) coordinating delivering the multimedia asset data file and associated metadata to a video-on-demand ("VOD") server maintained by the MSO, wherein coordinating delivering comprises (3a) tracking distributing the multimedia asset data file from the content provider to the MSO, and (3b) tracking uploading the multimedia asset data file from the MSO to the VOD server; and (4) providing usage reports relating to usage of multimedia asset data files by end users of the MSO.

Headings merely discloses metadata may include such descriptive information like copyright information, titles, authors, and abstracts (Headings, paragraph [0033], lines 5-6) or intelligent media may include license tracking information (Headings, paragraph [0033], lines 12-13), NOT the metadata related to at least accuracy of delivery of the multimedia asset data file. Descriptive information is merely related to the content and license tracking information is merely related to the distribution rights. None of these is related to the accuracy of delivery.

In addition, as discussed above under the §102(e) rejection, Headings merely discloses content suppliers can submit a media asset and associated business rules into a safe and secure platform depository (Headings, paragraph [0012], lines 1-4.), NOT validating the multimedia asset data file and the associated metadata by determining if the

multimedia asset data file and the associated metadata comply with business rules provided by the MSO. <u>Headings</u> explicitly states that the Digital Content Services function preferably includes use of a software-based application for creating and storing business rules 104, which govern how a particular media asset 102 is to be used (<u>Headings</u>, paragraph [0028], lines 1-4.) In other words, the business rules are used only to guide the use of the media asset 102. They are not used to validate the media asset 102.

     Furthermore, <u>Sim</u> merely discloses distributing large payload files (<u>Sim</u>, paragraph [0072], lines 1-3; paragraph [0076], lines 7-9; paragraph [0080], lines 4-6), NOT multimedia asset data files. A large payload file may merely include a large video file. It may not include the content elements and the metadata associated with each element.

     Moreover, <u>Sim</u> merely discloses the popularity index being provided by the content provider, NOT by the multiple service/system operator (MSO). A content provider is not the same as an MSO. A content provider provides the content, but the content provider does not provide services related to the distribution of the content as the MSO.

     <u>Sim</u> merely discloses uploading the content to a Content Management Server (CMS) (<u>Sim</u>, paragraph [0094], lines 1-6), NOT to a video-on-demand (VOD) server. A CMS merely gives the content provider a vehicle to upload large files (e.g., video) to the distribution centers (<u>Sim</u>, paragraph [0080], lines 4-6). The CMS does not distribute the video on demand, or based in the demand of the viewers. <u>Sim</u> does not disclose or render obvious a VOD server. Furthermore, since <u>Sim</u> does not disclose an MSO and/or a VOD server, <u>Sim</u> does not disclose coordinating delivering that comprises tracking distributing the multimedia asset data file from the content provider to the MSO and tracking uploading the multimedia asset data file from the MSO to the VOD server.

     The Examiner admits that <u>Headings</u> does not disclose tracking distributing the multimedia from one location to another location (<u>Final Office Action</u>, page 28, lines 9-12), but contends that <u>Sim</u> is used only for the teachings that tracking distributing the multimedia from one location to another location and tracking uploading the multimedia asset data file from the MSO to the VOD server (Final <u>Office Action</u>, page 13, lines 1-2; page 28, lines 13-19). However, the rejected claims do not recite distributing the multimedia asset from one location to another location. Rather, the rejected claims recite delivering the multimedia asset data file and associated metadata to a video-on-demand

("VOD") server maintained by the MSO and uploading the multimedia asset data file from the MSO to the VOD server. In other words, the sources and destinations are specifically recited as the MSO and the VOD server, not merely from one location to another location. Even if <u>Headings</u> may disclose the MSO or the VOD server, this fact cannot be combined with <u>Sim</u> to show that the combination discloses delivering the assets to the VOD server and uploading the file from the MSO and VOD server. If this combination is permissible, then a technical encyclopedia or even a dictionary may be used to reject virtually any claims.

The combination of <u>Headings</u> and <u>Sim</u> is improper in rejecting claims 1-24 because <u>Sim</u> does not disclose MSOs or VOD server.

For example, regarding claims 3-8, the Examiner contends that Sim discloses tracking receipt (e.g., ack/notification) (<u>Final Office Action</u>, page 29, lines 9-10). Applicant respectfully disagrees. <u>Sim</u> merely discloses the file management primitives necessary to transfer, store, and manipulate provider files (<u>Sim</u>, paragraph [0093], lines 1-3). The put_ack packet is used merely to indicate successful transmission (<u>Sim</u>, paragraph [0094], lines 25-27). It does not track receipt of the media data file. Furthermore, <u>Sim</u> merely discloses various commands/packets (put, distribute, replicate, get, prepare, search, remove, clean, etc.) (<u>Sim</u>, paragraphs [0094] – [0106]), not receiving an identification of the MSOs scheduled to receive the data file. Moreover, <u>Sim</u> does not disclose a catcher or a pitcher and therefore cannot disclose receiving an alarm signal if one of the elements is not successfully received by the catcher appliance as recited ion claim 8.

E. Claims 35-37, 44-45, and 49-50 Are Not Obvious Under 35 U.S.C. §103(a) Over Headings In View Of Ellis.

<u>Headings</u> is discussed above.

<u>Ellis '744</u> discloses a client-server electronic program guide. Each program guide server stores the program guide data provided by the main facility and provides access to the program guide data to program guide clients implemented on the user television equipment of a number of users associated with each television distribution facility (<u>Ellis '744</u>, paragraph [0007], lines 5-9). The program guide servers may also store user data, such as user preference profiles, parental control settings, record and reminder settings, viewing history, and other suitable data (<u>Ellis '744</u>, paragraph [0007], lines 10-13). A

program guide server 25 may record the viewing histories of users (Ellis '744, paragraph [0107], lines 1-3). Program guide systems may track user viewing activities and advertisement usage (Ellis '744, paragraph [0108], lines 9-10).

Headings and Ellis '744 , taken alone or in any combination, do not disclose or render obvious, at least one of: (1) – (3) as above under the §102(e) rejection; (4a) receiving a schedule request from a server; (4b) providing a customized or localized master schedule for the MSO to the server, the master schedule having an asset locator; (4c) receiving a metadata locator corresponding to the content from the server; (4d) providing an asset locator to the server in response to the metadata locator, the server retrieving an element of the content from a catcher using the asset locator; and (4e) interacting with the server during transfer of the element of the content from the catcher to the server.

As discussed above, Headings does not disclose or render obvious elements (1) – (3) as above. Accordingly, a combination of Headings with any other references in rejecting claims 35-37, 44-45, and 49-50 is improper.

Furthermore, Ellis '744 merely discloses program guide servers may store user data, such as user preference profiles, parental control settings, record and reminder settings, viewing history, and other suitable data (Ellis '744, paragraph [0007], lines 10-13), or the viewing histories of users (Ellis '744, paragraph [0107], lines 1-3), or track user viewing activities and advertisement usage (Ellis '744, paragraph [0108], lines 9-10), NOT receiving a schedule request, or a customized or localized master schedule for the MSO. The user preference profiles, viewing history, etc. are not related to the schedule request or the master schedule for the MSO. Furthermore, none of the user profiles, customized user guide schedule contains an asset locator. It is noted that receiving a schedule request from a server is recited as part of the coordinating uploading. Since Ellis '744 does not disclose coordinating uploading, none of what Ellis '744 discloses can be used to combine with Headings.

The Examiner contends that Ellis '744 discloses an asset locator such as channel source, time, etc. (Final Office Action, page 14, lines 7-10; lines 17-19.) Applicant respectfully disagrees. An asset locator is used to locate the asset, or the content. Here, the channel source or time can only refer to the channel on the television. It does not identify the location of the asset.

In the Final Office Action, the Examiner contends that "an asset locator is used to locate the asset or content" is not recited in the claim (Final Office Action, page 14, lines 16-17). Applicant respectfully disagrees. The term "asset locator" clearly indicates "locating the asset". Furthermore, the Specification provides ample support for the interpretation of this term. See, for example, page 32 (lines 22-23), paragraph [0048] (lines 9-10).

The Examiner failed to establish a prima facie case of obviousness and failed to show there is teaching, suggestion, or motivation to combine the references. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. *Hodosh v. Block Drug Col, Inc.,* 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). "When determining the patentability of a claimed invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggest the desirability, and thus the obviousness, of making the combination.'" *In re Beattie*, 974 F.2d 1309, 1312 (Fed. Cir. 1992), 24 USPQ2d 1040; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.,* 730 F.2d 1452, 1462, 221 USPQ (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. *Interconnect Planning Corp. v. Feil*, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show reasons that a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPQ 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner

must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973. (Bd.Pat.App.&Inter. 1985). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Furthermore, although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 USPQ2d at 1432; *In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992), 23 USPQ2d 1780.

Moreover, the Examiner failed to establish the factual inquires in the three-pronged test as required by the *Graham* factual inquires. There are significant differences between the cited references and the claimed invention as discussed above. Furthermore, the Examiner has not made an explicit analysis on the apparent reason to combine the known elements in the fashion in the claimed invention. Accordingly, there is no apparent reason to combine the teachings of Headings, Buehl, Sim, and Ellis '744 in any combination.

In the present invention, the cited references do not expressly or implicitly disclose any of the above elements. In addition, the Examiner failed to present a convincing line of reasoning as to why a combination of Headings, Buehl, Sim, and Ellis '744 is an obvious application of video-on-demand (VOD) management system,or an explicit analysis on the apparent reason to combine Headings, Buehl, Sim, and Ellis '744 in the manner as claimed.

Therefore, Applicant believes that independent claims 1, 6, 20, 25, 41, and 46 and their respective dependent claims are distinguishable over the cited prior art references.

VIII. CONCLUSION

Applicant respectfully requests that the Board enter a decision overturning the Examiner's rejection of all pending claims, and holding that the claims satisfy the requirements of 35 U.S.C. §102(e) and §103(a).

Respectfully submitted,

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IX.   CLAIM APPENDIX

The claims of the present application which are involved in this appeal are as follows:

1.   (previously presented) A method comprising:

receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a multiple service or systems operator ("MSO"), the multimedia asset data file having a content element with which the metadata is associated and being delivered to end users upon requested, the metadata related to at least accuracy of delivery of the multimedia asset data file;

validating the multimedia asset data file and the associated metadata by determining if the multimedia asset data file and the associated metadata comply with business rules provided by the MSO;

coordinating delivering the multimedia asset data file and associated metadata to a video-on-demand ("VOD") server maintained by the MSO, wherein coordinating delivering comprises:

> tracking distributing the multimedia asset data file from the content provider to the MSO, and
>
> tracking uploading the multimedia asset data file from the MSO to the VOD server; and

providing usage reports relating to usage of multimedia asset data files by end users of the MSO.

2.   (previously presented) The method of claim 1, wherein the metadata are provided by at least one of a plurality of content providers and a plurality of MSOs.

3.   (previously presented) The method of claim 1, wherein tracking distributing comprises:

tracking receipt of the multimedia asset data file in elements, the elements comprising at least one of a feature file, a preview file, a graphic file, and associated basic metadata, wherein the associated basic metadata comprises information on the elements used to confirm delivery of the elements;

receiving an identification of the MSOs scheduled to receive the multimedia asset data file from the content provider; and

receiving delivery dates for delivery of the multimedia asset data file to each of the MSOs.

4.   (previously presented) The method of claim 1, wherein tracking distributing comprises tracking distributing using a delivery group, the delivery group comprising a plurality of multimedia asset data files.

5.   (previously presented) The method of claim 1, wherein tracking distributing comprises:

registering the multimedia asset data file in order to identify the file, wherein registering the multimedia asset data file comprises:

assigning a provider identifier to the content provider, and

assigning a unique identifier to the multimedia asset data file provided by the content provider based upon the provider identifier and a provider asset identification, the provider asset identification being included with the multimedia asset data file by the content provider.

6.   (previously presented) The method of claim, wherein tracking receipt comprises:

staging the multimedia asset data file by entering a name for the multimedia asset data file into a staging directory; and

providing a master markup language file for the multimedia asset data file, the master markup language file comprising distribution information, scheduling information, content information, and an identification for the multimedia asset data file, wherein the content information comprises data to enable retrieval of a plurality of elements to assemble the multimedia asset data file.

7.   (previously presented) The method of claim 6, wherein the elements used to assemble the multimedia asset data file comprise at least one of a movie or feature file, a preview file, and a graphic file.

8.   (previously presented) The method of claim 1, wherein tracking distributing comprises:

tracking transmission of a plurality of elements of the multimedia asset data file to the MSO using a pitcher appliance;

tracking receipt of the elements of the multimedia asset data file using a catcher appliance; and

receiving an alarm signal if one of the elements of the multimedia asset data file is not successfully received by the catcher appliance.

9.   (previously presented) The method of claim 1, wherein tracking uploading comprises:

providing an asset locator identifying the multimedia asset data file to the VOD server;

providing a schedule to the VOD server comprising instructions for the VOD server to request the multimedia asset data file from a catcher and the metadata; and

tracking retrieval of the multimedia asset data file and associated metadata by initiating file transfers using the asset locator.

10.   (original) The method of claim 9 wherein the file transfer is a file transfer protocol ("FTP") transfer.

11.   (previously presented) The method of claim 1, wherein tracking uploading comprises:

providing an asset locator identifying an element of the multimedia asset data file to the VOD server, the VOD server submitting the asset locator to a catcher appliance;

tracking transmission of the element from the catcher appliance to the VOD server using the asset locator to retrieve the element.   .

12.   (previously presented) The method of claim 11, wherein tracking uploading further comprises:

receiving an alarm signal from the VOD server if the element is not properly received.

13.   (previously presented) The method of claim 12, wherein tracking uploading further comprises

performing a follow-up or diagnosis upon receiving the alarm indicating that the element is not properly received.

      14.   (previously presented) The method of claim 9, wherein the asset locator is an asset Uniform Resource Locator (URL).

      15.   (previously presented) The method of claim 1, wherein providing usage reports comprises:

      receiving from the VOD server data on feature elements requested by end users of the MSO;

      creating a master reporting database using the data on feature elements requested by end users; and

      generating a usage report using the data contained in the master reporting database.

      16.   (previously presented) The method of claim 15, wherein providing usage reports further comprises:

      restricting access by a content provider to the data contained in the master reporting database using the business rules provided by the MSO.

      17.   (previously presented) The method of claim 15, wherein providing usage reports further comprises:

      analyzing the usage report to determine end user viewing characteristics; and

      generating an advertising play list targeted to an end user based upon the viewing characteristics of the end user, wherein the advertising play list comprises advertising selected based upon the viewing characteristics of the end user.

      18.   (previously presented) The method of claim 17, wherein providing usage reports further comprises:

      supplementing a multimedia asset data file with data contained in the usage report, wherein the usage report comprises usage data for the multimedia asset data file.

      19.   (previously presented) The method of claim 15, wherein providing usage reports further comprises:

      analyzing the usage report to determine end user viewing characteristics;

      selecting multimedia asset data files based upon end user viewing characteristics; and

performing a campaign management function chosen from the group consisting of bundling selected multimedia asset data files, setting pricing for selected multimedia asset data files, and setting promotions for selected multimedia asset data files.

20. (previously presented) A method comprising:

receiving a plurality of multimedia asset data files having content elements from a plurality of content providers;

receiving metadata associated with the content elements in the plurality of multimedia asset data files from at least one of the plurality of content providers and a plurality of multiple service or systems operators (MSOs), the metadata related to at least accuracy of delivery of the multimedia asset data files;

receiving business rules provided by the MSO, the business rules corresponding to the multimedia asset data file and being identified with particular MSOs;

coordinating uploading the multimedia asset data files to video-on-demand ("VOD") servers maintained by the MSOs using an asset locator assigned to each multimedia asset data file; and

tracking uploading the multimedia asset data files.

21. (previously presented) The method of claim 20, further comprising:

validating the multimedia asset data files by determining if the received metadata and multimedia asset data files comply with business rules provided by the MSOs.

22. (previously presented) The method of claim 20, wherein coordinating uploading comprises:

coordinating uploading the associated metadata for the multimedia asset data files to the VOD servers;

distributing a localized master schedule to each MSO; and

providing a schedule update to each MSO at regular intervals.

23. (previously presented) The method of claim 22, wherein tracking comprises:

tracking uploading the multimedia asset data files and the associated metadata to the VOD servers by reference to each MSO's localized master schedule.

24. (original) The method of claim 22, wherein each schedule update comprises instructions for inserting and deleting multimedia asset data files from each MSO's localized master schedule.

25. (previously presented) A method comprising:

ingesting content and metadata associated with the content provided by a content provider;

coordinating distribution of the metadata and the content, the distribution using a pitcher and a catcher, the pitcher transferring the content to a multiple service or systems operator (MSO) and the catcher receiving the content; and

coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by the MSO.

26. (previously presented) The method of claim 25 further comprising: providing visibility into usage of the content.

27. (previously presented) The method of claim 25 wherein ingesting comprises:

registering the content; and

coordinating accessing the content located in one of an internal location and an external location.

28. (previously presented) The method of claim 27 wherein registering the content comprises:

assigning a provider identifier to the content provider; and

assigning a globally unique identifier to the content based on the provider identifier and a provider asset identifier.

29. (previously presented) The method of claim 25 wherein ingesting comprises:

receiving the business rules from the MSO; and

validating the metadata and the content using the business rules.

30. (previously presented) The method of claim 29 wherein receiving the business rules comprises:

receiving the business rules including at least one of a rating filter, a pricing rule, a category rule, and a platform conversion rule.

31. (previously presented) The method of claim 25 wherein ingesting comprises:

customizing an electronic program guide (EPG).

32. (previously presented) The method of claim 25 wherein ingesting comprises:

providing an interface to allow a user to view and analyze metadata and scheduling information associated with the content.

33. (previously presented) The method of claim 25 wherein coordinating the distribution comprises:

interacting with an asset distribution system (ADS) to facilitate delivery of the content from a content provider to the MSO, the ADS including the pitcher and the catcher.

34. (previously presented) The method of claim 33 wherein interacting with the ADS comprises:

receiving information regarding when a transmission of an element of the content is initiated from the pitcher;

requesting retransmission of the element if an alarm is received from the catcher; and

tracking a request from a server to release the content received by the catcher.

35. (previously presented) The method of claim 25 wherein coordinating uploading comprises:

receiving a schedule request from the server;

providing a customized or localized master schedule for the MSO to the server, the master schedule having an asset locator;

receiving a metadata locator corresponding to the content from the server;

providing an asset locator to the server in response to the metadata locator, the server retrieving an element of the content from a catcher using the asset locator; and

interacting with the server during transfer of the element of the content from the catcher to the server.

36. (previously presented) The method of claim 35 wherein providing the asset locator comprises:

re-transmitting the asset locator upon receiving an alarm from the server indicating that the asset locator is not received properly by the server.

37.   (previously presented) The method of claim 35 wherein interacting with the server comprises:

performing a follow-up or diagnosis upon receiving an alarm from the server indicating that the element is not received properly by the server.

38.   (previously presented) The method of claim 26 wherein providing visibility into usage of the content comprises:

preparing a usage report; and

providing access to the usage report to a multiple service or systems operator (MSO) or a content provider.

39.   (previously presented) The method of claim 38 wherein preparing the usage report comprises:

creating a master reporting database including usage information from across a MSO network.

40.   (previously presented) The method of claim 39 wherein preparing the usage report further comprises:

exporting the usage report to an analysis system.

41.   (previously presented) A content management system comprising:

an external layer to interface to an application client;

a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines comprising:

a workflow engine to manage workflows of ingesting a content and metadata associated with the content provided by a content provider, coordinating distribution of the metadata and the content, and coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems operator (MSO); and

a relational database to store the metadata.

42.   (previously presented) The system of claim 41 wherein the plurality of engines further comprises:

a business objects engine to managing business rules associated with the content, the business rules being provided by the MSO;

a package engine to manage packaging the content;

a scheduling engine to schedule deployment of the content;

a platform converter engine to customize an electronic program guide (EPG) designated by the MSO; and

a localization engine to localize the content.

43.   (previously presented) The system of claim 41 wherein the external layer comprises:

a Web service API to facilitate communication with an application used by one of the MSO and the content provider.

44.   (previously presented) The system of claim 43 wherein the Web service API performs operations comprising:

registering the content;

receiving a confirmation call from one of a pitcher and a catcher regarding status of transfer of an element of the content; and

receiving a schedule request from the server for a schedule to distribute or upload the content.

45.   (previously presented) The system of claim 44 wherein the Web service API further performs operations comprising:

receiving a metadata request from the server for localized package metadata; and

receiving a reporting call from the server to deliver usage report.

46.   (previously presented) A system comprising:

a server;

a distribution network coupled to the server to distribute a content provided by a content provider; and

a content management system coupled to the server and the distribution network, the content management system comprising:

an external layer to interface to an application client;

a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines comprising:

a workflow engine to manage workflows of ingesting the content and metadata associated with the content, coordinating distribution of the metadata and the content, and coordinating uploading the metadata and the content to the server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems operator (MSO); and

a relational database to store the metadata.

47.   (previously presented) The system of claim 46 wherein the plurality of engines further comprises:

a business objects engine to managing business rules associated with the content, the business rules being provided by the MSO;

a package engine to manage packaging the content;

a scheduling engine to schedule deployment of the content;

a platform converter engine to customize an electronic program guide (EPG) designated by the MSO; and

a localization engine to localize the content.

48.   (previously presented) The system of claim 46 wherein the external layer comprises:

a Web service API to facilitate communication with an application used by one of the MSO and the content provider.

49.   (previously presented) The system of claim 48 wherein the Web service API performs operations comprising:

registering the content;

receiving a confirmation call from one of a pitcher and a catcher regarding status of transfer of an element of the content; and

receiving a schedule request from the server for a schedule to distribute or upload the content.

50.   (previously presented) The system of claim 49 wherein the Web service API further performs operations comprising:

receiving a metadata request from the server for localized package metadata; and

receiving a reporting call from the server to deliver usage report.

51.   (previously presented) The system of claim 46 wherein the distribution network comprises:

a pitcher used by the content provider to transmit the content and the metadata to the MSO via a distribution channel;

a catcher used by the MSO to receive transmission from the pitcher via a downlink channel.

52.   (previously presented) The system of claim 51 wherein the distribution channel comprises a satellite uplink facility and the downlink channel comprises a satellite downlink facility.

53.   (previously presented) The system of claim 51 wherein one of the pitcher and the catcher communicates with the content management system via a network connection.

54.   (previously presented) The system of claim 51 wherein the catcher receives the content locally using one of a physical medium, a local network, and a terrestrial-based network.

55.   (previously presented) The system of claim 46 wherein the content is one of a video-on-demand (VOD) content, an asset data file, a broadband content, and a network content.

X.   EVIDENCE APPENDIX

None.

XI.   RELATED PROCEEDINGS APPENDIX

None.